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PATENT
ATTORNEY DOCKET NO.: 09430/249002
U.S. PATENT APPLICATION SERIAL NO.: 10/322,038

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hemphill, *et al.* Art Unit: 3672
Serial No.: 10/322,038 Examiner: F. Tsay
Filed: December 17, 2002
Title: MOUNTS FOR BLOWOUT PREVENTER BONNETS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL AMENDMENT

Dear Sir:

Thank you for taking the time to meet with Ed Hemphill and Michael Leman.
Further to that meeting, please consider the following amendments and remarks.

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Application No. (if known): 10/322,038

Attorney Docket No.: 09430/249002

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Transmittal (1 page)
Supplemental Amendment (9 pages)

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IN THE CLAIMS:**BEST AVAILABLE COPY**

Please amend the claims as follows.

1. (Currently Amended) A mount for a bonnet of a blowout preventer, comprising:
 at least one support member coupled to a body of the blowout preventer; and
 a bonnet mounting member moveably coupled to the at least one support member
 and adapted to move substantially normal to a face of the body of the blowout
 preventer;
 wherein the bonnet is coupled to the bonnet mounting member;
wherein the bonnet is in sealing engagement with the body of the blowout
 preventer in an engaged position.
2. (Original) The mount of claim 1, wherein the at least one support member comprises a first
 support member adapted to have wheels travel along a top surface thereof and a second
 support member adapted to have wheels travel along a top surface thereof, and wherein the
 bonnet mounting member comprises a first wheel block disposed at a first end of the bonnet
 mounting member and adapted to roll along the top surface of the first support member and a
 second wheel block disposed at a second end of the bonnet mounting member and adapted to
 roll along the top surface of the second support member.
3. (Original) The mount of claim 2, wherein the first wheel block comprises two wheels and
 the second wheel block comprises two wheels.
4. (Original) The mount of claim 2, further comprising a swivel coupled to the bonnet
 mounting member and to the bonnet, the swivel adapted to enable rotation of the bonnet
 when the bonnet is disengaged from the body of the blowout preventer.
5. (Original) The mount of claim 4, wherein the swivel is coupled to the bonnet proximate a
 center of mass of the bonnet.

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6. (Original) The mount of claim 4, wherein the swivel is coupled to the bonnet proximate an axis of the bonnet.
7. (Original) The mount of claim 4, further comprising a bearing disposed between the bonnet mounting member and the swivel.
8. (Original) The mount of claim 7, wherein the bearing comprises one selected from a group consisting of a thrust bearing and a radial bearing.
9. (Original) The mount of claim 1, wherein the at least one support member comprises a first support member hingedly coupled to the body of the blowout preventer and a second support member hingedly coupled to the body of the blowout preventer.
10. (Original) The mount of claim 9, wherein the first support member and the second support member are hingedly coupled to the body of the blowout preventer to enable horizontal movement of the bonnet.
11. (Original) The mount of claim 9, wherein the first support member and the second support member are hingedly coupled to the body of the blowout preventer to enable vertical movement of the bonnet.
12. (Original) The mount of claim 9, further comprising:
 - a first movement block moveably coupled to the first support member and rotationally coupled to the bonnet mounting member; and
 - a second movement block moveably coupled to the second support member and rotationally coupled to the bonnet mounting member.
13. (Original) The mount of claim 12, wherein the bonnet mounting member is coupled to the bonnet proximate a center of mass of the bonnet.
14. (Original) The mount of claim 12, wherein the bonnet mounting member is coupled to the bonnet proximate an axis of the bonnet.

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5. (Original) The mount of claim 9, wherein the bonnet mounting member is slideably coupled to the first support member and to the second support member.
6. (Original) The mount of claim 9, wherein the bonnet mounting member comprises at least one first wheel adapted to roll along the first support member and at least one second wheel along the second support member.
17. (Original) The mount of claim 1, wherein the at least one support member comprises a first support member hingedly coupled to the blowout preventer body on a first side of the side opening, and a second support member hingedly coupled to the blowout preventer body on the first side of the side opening.
18. (Original) The mount of claim 17, further comprising a vertical bonnet support member moveably coupled to the first support member and the second support member, and coupled to the bonnet mounting member.
19. (Original) The mount of claim 18, wherein the vertical bonnet support member is slidably coupled to the first support member and the second support member.
20. (Original) The mount of claim 19, wherein the vertical bonnet support member comprises a bearing.
21. (Original) The mount of claim 20, wherein the bearing comprises one selected from a group consisting of a thrust bearing and a radial bearing.
22. (Original) The mount of claim 18, further comprising:
a third support member coupled to the blowout preventer body on a second side of the side opening; and
a movement block moveably coupled to the third support member and coupled to the bonnet mounting member;

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wherein the third support member has a length selected so that the movement block decouples from the third support member when the bonnet mounting member is moved away from the blowout preventer body.

23. (Original) The mount of claim 22, wherein the movement block is slidably coupled to the third support member.

24-46. (Cancelled)

47. (Currently Amended) A method for accessing a ram cooperatively attached to a bonnet of a blowout preventer, the method comprising:

disengaging the bonnet from a body of the blowout preventer;

moving the bonnet away from the body of the blowout preventer in a direction substantially normal to a face of the body of the blowout preventer; and

accessing the ram;

wherein the bonnet comprises at least one bonnet mounting member extending therefrom,

wherein the at least one bonnet mounting member is moveably coupled to at least one support member coupled to the body of the blowout preventer,

wherein the bonnet is in sealing engagement with the body of the blowout preventer in an engaged position.

48. (Currently Amended) The method of claim 47, wherein moving the bonnet comprises rolling the bonnet using wheels connected to the at least one support member, and further comprising rotating the bonnet with respect to the body of the blowout preventer.

49. (Original) The method of claim 48, wherein the rotating the bonnet occurs about a rotational axis that intersects a center of mass of the bonnet.

50-54. (Cancelled)

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55. (New) The mount of claim 1, wherein the sealing engagement comprises a radial seal sealingly engaged with an inner sealing surface of the body of the blowout preventer.
56. (New) The mount of claim 55, wherein the sealing engagement further comprises a face seal sealingly engaged with a face surface of the body of the blowout preventer.
57. (New) The mount of claim 1, wherein the bonnet mounting member comprises at least one of a linear bearing and a bushing disposed between the bonnet mounting member and the at least one support member.
58. (New) The mount of claim 1, wherein the at least one support member is disposed below an axis of a side opening of the body of the blowout preventer.
59. (New) A mount for a bonnet of a blowout preventer, comprising:
at least one support member coupled to a body of the blowout preventer; and
a bonnet mounting member moveably coupled to the at least one support member
and adapted to move substantially normal to a face of the body of the blowout preventer;
wherein the bonnet is coupled to the bonnet mounting member;
wherein the at least one support member is disposed below an axis of a side opening of the body of the blowout preventer.
60. (New) The mount of claim 59, wherein the bonnet is in sealing engagement with the body of the blowout preventer in an engaged position.
61. (New) The mount of claim 60, wherein the sealing engagement comprises a radial seal sealingly engaged with an inner sealing surface of the body of the blowout preventer.
62. (New) The mount of claim 61, wherein the sealing engagement further comprises a face seal sealingly engaged with a face surface of the body of the blowout preventer.

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REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering the application and for the courtesy extended during the Examiner interview on April 3, 2006.

I. Status of the Claims

Claims 1-23, 47-49, and 55-62 are pending in the present application. Of those claims, claims 1, 47, and 59 are independent. The remaining claims depend, directly or indirectly from claims 1, 47, and 59. Claims 24-28, 30-46, and 50-54 have been cancelled in this amendment without prejudice or disclaimer.

II. Election of Species

Applicant confirms the election of Species I, sub-species (a), for further prosecution on the merits. Species I relates to a bonnet mount with at least one support member coupled to a blowout preventer. Pending claims 1-28 and 47-49 read on Species I. Claims that read on the non-elected species have been cancelled without prejudice or disclaimer.

Claims 1, 47, and 55-57 are generic to all sub-species. New claims 58-62 are sub-generic to sub-species (a)-(c). Claims 2, 3, 9, 16, 48, and 49 read on sub-species (a). Claims 9-11 and 17-23 read on sub-species (b). Claims 9-15 read on sub-species (c). Claims 4-8 and 24-28 read on sub-species (d). All pending claims depend from generic claim 1, 47, or 59.

III. Claim Amendments

Claims 1 and 47 have been amended according to the understanding reached during the Examiner interview on April 3, 2006. As amended, claims 1 and 47 recite that there

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s sealing engagement between the bonnet and the body of the blowout preventer when the bonnet is in the engaged position. New claims 55 and 56 recite further details of the sealing engagement. Support for the amendments may be found, for example, in Figures 15-18. New claim 57 recites that at least one of a linear bearing and a bushing is disposed between the bonnet mounting member and the at least one support member. Support for claim 57 may be found, for example, on page 27, ¶ 114, of the specification.

New claims 58 and 59 have been added according to the understanding reached during the Examiner interview. New claims 58 and 59 recite that the at least one support member is disposed below an axis of a side opening of the body of the blowout preventer. Support for claims 58 and 59 may be found, for example, in Figure 29C. New claim 60, which depends from claim 59, recites that there is sealing engagement between the bonnet and the body of the blowout preventer when the bonnet is in the engaged position. New claims 61 and 62 recite further details of the sealing engagement. No new matter has been added by the above claim amendments and new claims.

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IV. Conclusion

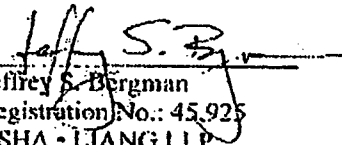
Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 09430/249002).

Dated:

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Respectfully submitted,

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